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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/575,499	12/12/2006	Peter James	348-103	3789		
1009	7590	12/07/2009	EXAMINER			
KING & SCHICKLI, PLLC 247 NORTH BROADWAY LEXINGTON, KY 40507				KWIECINSKI, RYAN D		
ART UNIT		PAPER NUMBER				
3635						
MAIL DATE		DELIVERY MODE				
12/07/2009		PAPER				

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/575,499	JAMES, PETER	
	<b>Examiner</b>	<b>Art Unit</b>	
	RYAN D. KWIECINSKI	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 11 April 2006.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-14 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-14 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 11 April 2006 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>4/11/2006</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

### *Drawings*

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

#### **1) Reference number 4a (Page 6, line 2)**

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. **Therefore, the containers touching beyond the opposing sidewalls of the frames per claim 7 and the structure in the form of a wheeled vehicle per claim 9 must be shown** or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

**The abstract of the disclosure is objected to** because the abstract is written using legal phraseology often used in patent claims. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The

abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

**The disclosure is objected to because of the following informalities:**

The headings for "Brief Description of the Drawing Figures" and "Detailed Description of the Invention" should be separated.

Brief Description of the Drawing Figures should be located on Page 3, before the paragraph beginning "The invention will now be described....".

Detailed Description of the Invention should be located on Page 4, before the paragraph beginning "Referring firstly to Figures 1 and 2..."

Appropriate correction is required.

***Claim Objections***

**Claim 11 are objected to because of the following informalities:**

**Claim 11** recites the limitation "**each open end of said tunnel**" in lines 2-3.

There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 4-7, and 12-13 are rejected under 35 U.S.C. 112, second paragraph,** as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Regarding claim 4,** the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

**Claim 5** recites the limitation "**the exposed parts**" in line 3. There is insufficient antecedent basis for this limitation in the claim.

**Claim 7** recites the limitation "**opposing sidewalls**" of the channel section and "**opposing sidewalls**" of the containers in lines 2, 3, and 6. There is insufficient antecedent basis for this limitation in the claim.

**Claim 12,** the claimed limitations of claim 12 were previously claims in claims 1 and 12. This makes the claim vague, indefinite, and confusing because it is unclear whether Applicant is claiming the original structure of claim 1 or if Applicant is claiming a second "one or more rupturable containers" and "one or more rigid free-standing frames". Applicant should eliminate the reiteration of the claimed subject matter in order to avoid a double patenting rejection amongst the listed claims.

**The claims have been examined as best understood.**

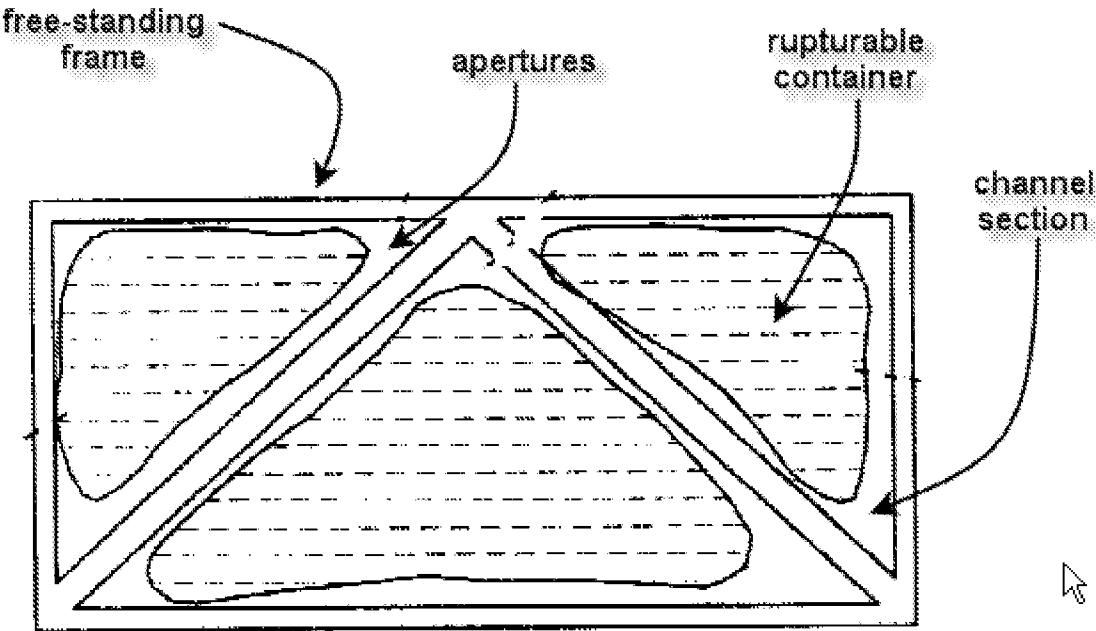
***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 3-6, 8, and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,302,026 B1 to Parkes.**



**Claim 1:**

Parkes discloses a blast mitigation structure comprising one or more rigid free-standing frames (see figure above) of one or more channel section (see figure above), the or each frame being adapted to receive in the or each channel, in use, one or more

rupturable containers (32, See figure above) adapted to contain liquid (Column 4, lines 3-4) to thereby form a protective tunnel (Fig.5).

The recitation “around a vehicle for mitigating against the effects of an explosion” is a capability limitation. The protective structure of Parkes is capable of protecting a vehicle from an explosion. Parkes discloses protecting buildings, aircraft, and infrastructure (Column 3, lines 8-12), so the structure is clearly capable of protecting a vehicle.

### **Claims 3-6, 8, and 12-13:**

Parkes discloses the blast mitigation structure of claim 1:

**Regarding claim 3**, wherein the or each rigid free-standing frame is made of a rigid, lightweight material (Column 1, lines 32-37; Column 3, lines 40-45).

**Regarding claim 4 as best understood**, wherein the material is reinforced plastic (Column 1, lines 32-37; Column 3, lines 40-45).

**Regarding claim 5 as best understood**, wherein the or each rigid free-standing frame has apertures (see figure above) therein such that the exposed parts of the or each rupturable container are in the direct path of an explosion.

**Regarding claim 6 as best understood**, in which the or each free-standing frame has apertures therein in the form of a grill (the multiple apertures form a grill).

**Regarding claim 8**, wherein said structure is transportable (Column 4, lines 6-9).

**Regarding claim 12 as best understood**, further comprising one or more rupturable containers containing liquid (32, see Figure above), the blast mitigation

structure forming a protective tunnel  
(Fig.5).

The recitation “around a vehicle for mitigating against the effects of an explosion” is a capability limitation. The protective structure of Parkes is capable of protecting a vehicle from an explosion. Parkes discloses protecting buildings, aircraft, and infrastructure (Column 3, lines 8-12), so the structure is clearly capable of protecting a vehicle.

**Regarding claim 13 as best understood,** a kit of parts capable of providing a blast mitigation structure according to claim 12 (see rejection above), the kit of parts comprising one or more rupturable containers (See figure above) adapted to contain liquid and one or more rigid free-standing frames (See figure above) of one or more channel section (See figure above), the or each frame being adapted to receive in the or each channel, in use, said one or more rupturable containers (See figure above).

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 2 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,302,026 B1 to Parkes in view of US 2003/0145530 A1 to James.**

**Claim 2:**

Parkes discloses the blast mitigation structure according to claim 1, but does not disclose wherein the or each rigid free-standing frame is in the form of an arch.

James discloses wherein the or each rigid free-standing frame is in the form of an arch (Fig.3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the structure with an arch shape if an arch shape was suitable for the structure being protected. Forming an arch shaped structure is a routine engineering design choice. The arch shape will assist in reducing the impact taken upon explosion because of the rounded sides as well as reduce the amount of debris able to land and fall on top of the structure. Arched shaped formations are notoriously well known in the construction art.

**Claim 10:**

Parkes discloses the blast mitigation structure according to claim 1, wherein a plurality of said rigid free-standing frames are placed adjacent each other (Fig.2, 4, 5) but does not disclose wherein the rigid free-standing frames form an arched tunnel.

James discloses wherein the rigid free-standing frames form an arched tunnel (Fig.3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the structure with an arch shape if an arch shape was suitable for the structure being protected. Forming an arch shaped structure is a routine engineering design choice. The arch shape will assist in reducing the impact taken upon explosion because of the rounded sides as well as reduce the amount of debris able to land and fall on top of the structure. Arched shaped formations are notoriously well known in the construction art.

**Claim 11:**

Parkes in view of James discloses the blast mitigation structure according to claim 10, James also discloses wherein free-standing water-filled rupturable containers are positioned at each open end of said tunnel (Fig.13(a)-13(c)), so as to provide a closed structure.

**Claim 7 is rejected as best understood under 35 U.S.C. 103(a) as being unpatentable over US 6,302,026 B1 to Parkes in view of US 3,854,253 to Slowbe.**

**Claim 7:**

Parkes discloses the blast mitigation structure according to claim 1, but does not specifically disclose wherein opposing sidewalls of the or each said channel section of the or each rigid free-standing frame extend only partially around opposing side walls of the or each rupturable container, such that where two or more of such frames and corresponding containers are placed side-by-side, when inflated the side-by-side containers touch beyond the opposing sidewalls of the side-by-side frames.

Slowbe discloses wherein opposing sidewalls of the or each said channel section (34, 36, Fig.1) of the or each rigid free-standing frame extend only partially around opposing side walls of the or each rupturable container (46, 48), such that where two or more of such frames and corresponding containers are placed side-by-side, when inflated the side-by-side containers touch beyond the opposing sidewalls of the side-by-side frames (if two or more frame members are aligned adjacently, the rupturable containers (20) will touch beyond the sidewalls of the frame members).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the structure with rupturable bags that protruded beyond the sidewalls of the frame members as taught by Slowbe. The rupturable containers will project beyond the frame sidewalls and contact one another forming a wall of the structure that will be void of gaps or openings between the rupturable containers, further protecting the structure which lies inside of the blast mitigation structure. The surface of the mitigation structure will be formed completely of rupturable bags which will be able to dissipate the blast along the entire outer surface.

**Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,302,026 B1 to Parkes in view of US 5,706,615 to Bridges et al.**

**Claim 9:**

Parkes discloses blast mitigation structure according to claim 8, but does not disclose wherein said structure is in the form of a wheeled vehicle.

Bridges et al. disclose wherein said structure is in the form of a wheeled vehicle (26, Fig.3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the structure in the form of a wheeled vehicle as taught by Bridges in order to be able to transport the structure without the use of additional transportation means. Having a structure that is capable of moving without the use of additional transportation will reduce the costs of moving the structure from one point to another and reduce the hassle of placing the structure onto a trailer, truck, etc.

**Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,302,026 B1 to Parkes in view of US 4,261,329 to Walsh et al.**

**Claim 14:**

Parkes discloses the kit of parts according to claim 13, but does not disclose further comprising a plurality of trolleys on which at least the one or more rigid free-standing frames are disposed.

Walsh et al. disclose further comprising a vehicle on which at least the one or more rigid free-standing frames are disposed. (Fig.1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a trolley to transport the structure as taught by Walsh. Although Walsh does not specifically disclose a trolley, Walsh does disclose a transportation means such as a trailer. It is notoriously well known to use trailers, flat bed trucks, carts, etc. to transfer large structures from point A to point B. Applicant is claiming a kit for a blast mitigation structure and not a means to transport the blast mitigation structure from one point to another.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN D. KWIECINSKI whose telephone number is (571)272-5160. The examiner can normally be reached on Monday - Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basil Katcheves can be reached on (571)272-6846. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RDK  
/Ryan D Kwiecinski/  
Examiner, Art Unit 3635  
/Basil Katcheves/  
Primary Examiner, Art Unit 3635

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